

## PATENT COOPERATION TREATY

## PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT  
(PCT Article 36 and Rule 70)

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Applicant's or agent's file reference P17418-ELNRDTO	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/EP 03/11672	International filing date (day/month/year) 22.10.2003	Priority date (day/month/year) 01.11.2002
International Patent Classification (IPC) or both national classification and IPC H04L12/24		
Applicant TELEFONAKTIEBOLAGET LM ERICSSON (PUBL) et al.		

<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 5 sheets, including this cover sheet.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of sheets.</p>
<p>3. This report contains indications relating to the following items:</p> <ul style="list-style-type: none"> <li>I <input checked="" type="checkbox"/> Basis of the opinion</li> <li>II <input type="checkbox"/> Priority</li> <li>III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</li> <li>IV <input type="checkbox"/> Lack of unity of invention</li> <li>V <input checked="" type="checkbox"/> Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</li> <li>VI <input type="checkbox"/> Certain documents cited</li> <li>VII <input type="checkbox"/> Certain defects in the international application</li> <li>VIII <input type="checkbox"/> Certain observations on the international application</li> </ul>

Date of submission of the demand 25.05.2004	Date of completion of this report 16.08.2004
Name and mailing address of the international preliminary examining authority: European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 eprmu d Fax: +49 89 2399 - 4465	Authorized Officer Bub, A Telephone No. +49 89 2399-7209



**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/EP 03/11672

**I. Basis of the report**

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

**Description, Pages**

1-14 as originally filed

**Claims, Numbers**

1-18 as originally filed

**Drawings, Sheets**

1/6-6/6 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- the language of publication of the international application (under Rule 48.3(b)).
- the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- contained in the international application in written form.
- filed together with the international application in computer readable form.
- furnished subsequently to this Authority in written form.
- furnished subsequently to this Authority in computer readable form.
- The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- the description, pages:
- the claims, Nos.:
- the drawings, sheets:

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5.  This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).  
*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Yes: Claims	1-18
	No: Claims	
Inventive step (IS)	Yes: Claims	1-18
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-18
	No: Claims	

**2. Citations and explanations**

**see separate sheet**

1. The invention relates to a method (independent claim 1) and a system (independent claim 10) for policy-based control of a communication network having a distributed architecture. Policies are exchanged between policy decision points (PDPs) and policy enforcement points (PEPs), both instances known from the Common Open Policy Service (COPS) protocol defined in IETF Request For Comments (RFC) 2748.

**2. Prior art:**

Document D1 (EP 1 091 526), which is considered to be the closest prior art, discloses a system defining the role of routers and exchanged information as policy enforcement points (PEPs) as clients in conjunction with policy decision points (PDPs) as servers, according to the COPS protocol defined by IETF. Additionally, policies are spread among domains with the help of interconnected PDPs. A negotiation protocol is used to exchange policies between the different PDPs.

**3. Problem:**

The flexibility of the exchange of policies between instances of the network should be enhanced.

**4. Solution:**

According to the characterizing features of the independent claims, at least one PEP serves as a server towards at least one PDP, being a client.

**5. Difference:**

In contrast to the disclosure of document D1, the PEP serves as a client, therefore being able to send policies to other PDPs. In D1, the policies are spread between different PDPs, and therefore, another PDP connected to PEP is used. In contrast according to the invention, the policies can be directly requested by a PDP from a PEP, which advantageously leads to avoiding the need to request them from a second PDP.

There is no indication in the prior art, especially in D1, that would lead the person skilled in the art to implement a system in which at least one PEP serves as a server towards a client PDP. The remaining documents cited in the International Search Report only refer to a more general prior art background in policy communications systems.

**Defects in the International Application**

**INTERNATIONAL PRELIMINARY  
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International application No. PCT/EP03/11672

Apart from the statement with regard to novelty, inventive step or industrial applicability, the attention of the reader is drawn to the fact that there are certain defects that might be raised in the regional phase of the application:

- A. Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the document D1 is not mentioned in the description, nor is this document identified therein.
- B. The features of the claims are not provided with reference signs placed in parentheses (Rule 6.2(b) PCT).
- C. The vague and imprecise statement in the description on page 14, line 12-19 implies that the subject-matter for which protection is sought may be different to that defined by the claims, thereby resulting in lack of clarity of the claims (Article 6 PCT) when used to interpret them (see the PCT Guidelines, III-4.3a). This statement or at least the wording "spirit" should therefore be deleted to remove this inconsistency.